

## CHAPTER 17 - ELECTRONIC DOCUMENT SUBMITTALS

### 1.0 General Information

- 1.1 These guidelines establish minimum standards, which must be met in the submission of electronic data on all State of Kansas capital improvement projects. These standards provide uniform methods of archiving and sharing electronic data between the various owner/state agencies and project architects /engineers.
- 1.2 Reference Chapter 13, Section 8.0 for submittals for bidding purposes.
- 1.3 These standards are not meant to dictate the in-house methods or means by which each project architect/engineer creates construction documents in the normal conduct of their business. They are intended to establish standards for electronic files at the time they are submitted to the Division of Facilities Management for retrieving and archiving purposes.
- 1.4 The standards in Chapter 17 are mandatory for all project submittals.
- 1.5 The project architect/engineer is responsible for all consultants work.
- 1.6 Contact the Division of Facilities Management at 785-296-8899 for any clarification regarding these submittal requirements.

### 2.0 Submittal Requirements for .PDF Documents

- 2.1 Drawings and specifications shall be submitted in .PDF format.
  - 2.1.1 All scanned, files submitted in .PDF shall be saved at 300 dpi.
  - 2.1.2 Specifications shall be saved as one (1) document per specification division. File names must contain the DFM project number and the specification division number.
  - 2.1.3 Drawings shall be saved in one (1) drawing sheet per file. File names must contain the DFM project number, the sheet number and a brief description.

### 3.0 Submittal Requirements for .DWG Documents

- 3.1 Drawings in .DWG format are not required to be supplied to DFM or the agency unless included as part of the fee negotiation.
- 3.2 When negotiated, .DWG files shall comply with the current United States National CAD Standard current layering standards as published by the National Institute of Building Sciences. More information is available at <http://www.buildingsmartalliance.org/ncs/>.
- 3.3 All drawing files shall be submitted in ".DWG" format **only** on CD / DVD by the current version of Autodesk AutoCAD.
- 3.4 Drawings shall be saved in one (1) drawing sheet per file. File names must contain the DFM project number, the sheet number and a brief description.
- 3.5 All data in submitted .DWG file(s) for new projects shall be in a vector format. Raster format data shall be permitted only for existing facilities, either as stand-alone files or as underlays for remodeling projects within existing facilities.
- 3.6 All Fonts shall be non-proprietary and included with all electronic submission.

#### 4.0 File Content and Accuracy for .DWG

- 4.1 Accuracy: Accepted professional standards shall be maintained in the production of all electronic drawings and specifications.
- 4.2 Unused Entities: Before being submitted to DFM, all.DWG files shall be purged or packed of all unused entities, such as unused blocks (including nested blocks), symbols, layers and styles.
- 4.3 Display: All submitted .DWG files shall be saved in a "Zoom Extents" view.

#### 5.0 Deliverables

- 5.1 Each project shall be delivered on CD / DVD to DFM with one (1) project per CD / DVD.
- 5.2 All submitted CD / DVDs shall be in a format appropriate for Microsoft Windows based operating systems.
- 5.3 Create CD / DVD with a single closed recording session on a fully readable and **non-rewritable** CD / DVD.
- 5.4 All CD / DVD should include a drawing index in either Excel or Word.
- 5.5 Include all other files, which may be required to create "ready-to-plot" drawings.
- 5.6 Two steps for file conversion will be used to assure proper file creation of .DWG documents
  - 5.6.1 Bind individual drawings to include all reference files.
  - 5.6.2 Use "e-transmit" to attach all font and plot settings to the drawing file. Unzip the "e-transmit" file and place in a job folder on the CD / DVD.
- 5.7 The CD / DVD shall contain no more than two levels of folders. Reference the figures below.

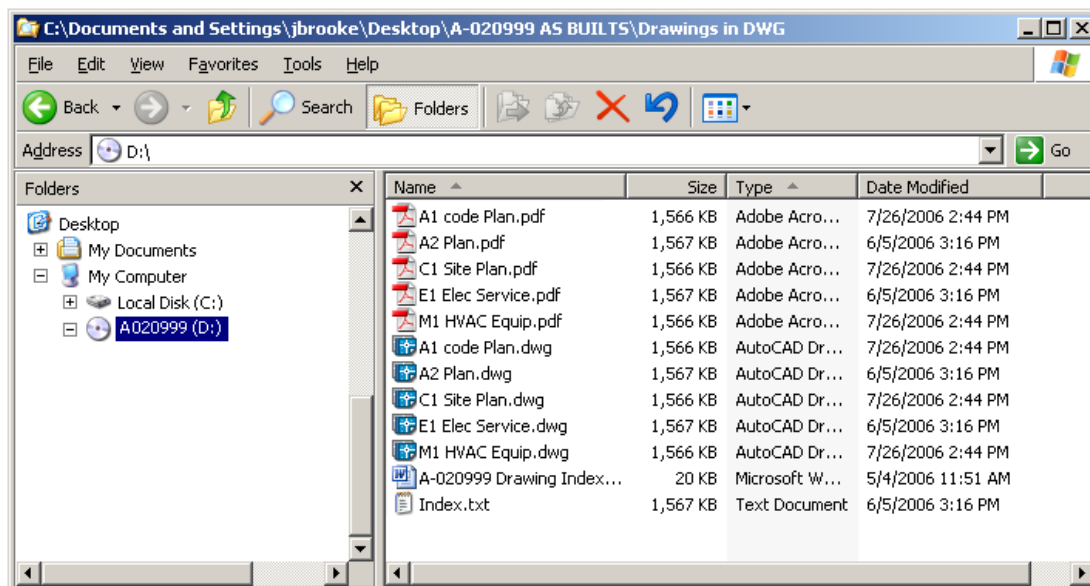


Figure 4.1 File Structure of CD / DVD for Simple Projects

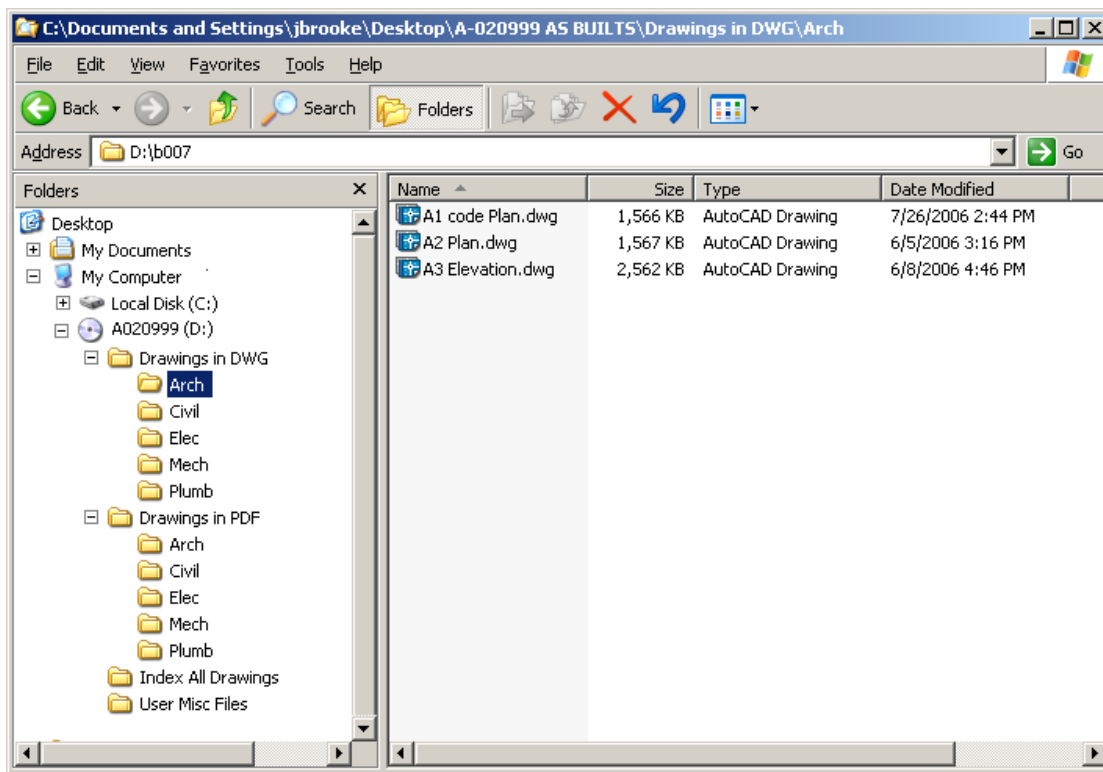


Figure 4.2 File Structure for CD / DVD for Complex Projects

## 5.8 File Naming Conventions

- 5.8.1 Each electronic drawing shall be submitted using a standard naming convention.
- 5.8.2 Due to the large size of .DWG files, each drawing sheet shall be a separate file document. Multiple sheets in one file document will not be accepted.
- 5.8.3 All document names begin with the DFM project number, sheet number followed by an abbreviated sheet title.

## 5.9 Media Labeling

- 5.9.1 CD / DVD's shall be labeled using a computer generated pressure sensitive label, similar to Avery 5824, or printed directly to surface similar to Light Scribe.
- 5.9.2 The following information shall be provided on the label: DFM project number, project title, document submittal date (for as-builts, use the project completion date), firm name, file format, and contents, such as final bid documents or as-builts.
- 5.9.3 If a project is large enough to be submitted on multiple CD / DVD's, each submitted CD / DVD shall have a unique electronic volume label. The label shall consist of the DFM project number followed by the volume number.
- 5.9.4 If more than one CD / DVD is submitted, label the disk number of total number submitted (ex. "Disk 1 of 3"). The project number shall be printed with a minimum bold 12-point Arial font size.

- 5.9.5 Hand lettering directly onto CD / DVD or onto a pressure sensitive label with a permanent marker will **NOT** be accepted. A permanent marker may deteriorate the CD / DVD dye layer rendering them unusable.

**END OF CHAPTER 17**